AMENDMENTS TO CLAIMS

Claim 1 (Currently Amended): A [[D]]device for manufacturing lollipops [[,]] comprising:

a) a rotatably driven drum ~~provided~~ with a casing;

b) a plurality of lollipop moulds at [[its]] the circumference of the casing[[,]];

c) a supply for supplying a strand of lollipop material to the plurality of lollipop moulds; and

d) a discharge for lollipops formed in the plurality of lollipop moulds[[,]];

wherein the drum is disposed on a hollow shaft;

~~and wherein the lollipop moulds are disposed at the circumference of a casing,~~

wherein the area between the casing and the hollow shaft [[which]] defines an annular space ~~with the hollow shaft~~[[,]];

wherein the plurality of lollipop moulds ~~for instance~~ comprise lower moulds that are solid with the casing and upper moulds that are hinged to the lower moulds[[,]];

wherein the hollow shaft is provided with a first passage and a second passage, each forming a fluid connection between the cavity in the hollow shaft and the annular space [[,]];

wherein the hollow shaft is provided with a fluid supply and a fluid discharge so that the fluid discharges through the first passage or second passage into the annular space;[[,]]

wherein the [[which]] fluid supply is in fluid connection with a pressure source for cooling air[[,]]; and

wherein the casing with the lollipop moulds detaches and re-attaches from ~~forms a detachable part of~~ the device and [[can be]] is slid on the hollow shaft when being attached or detached ~~placed or removed~~.

Claim 2 (Currently Amended): The [[D]]device according to claim 1, wherein the casing is rotatable about the hollow shaft.

Claim 3 (Currently Amended): The [[D]]device according to claim 1, wherein the hollow shaft is provided with a longitudinal partition which separates the supply from the discharge.

Claim 4 (Currently Amended): The [[D]]device according to claim 1, wherein the inner surface of the casing is provided with cooling ribs.

Claim 5 (Currently Amended): A [[D]]device for manufacturing lollipops[[,]] comprising:

a) a rotatably driven drum ~~provided with~~ a casing;

b) a plurality of lollipop moulds at [[its]] the circumference of the casing[[,]];

c) a supply for supplying a strand of lollipop material to the plurality of lollipop moulds; and

d) a discharge for lollipops formed in the plurality of lollipop moulds[[,]];

~~wherein the lollipop moulds are disposed at the circumference of a casing,~~

wherein the lollipop moulds are bounded by mould members, of which at least one is movable from a free position to a wanted mould position;

wherein the movable mould member [[while]] exerts[[ing]] pressure on the lollipop mass in the lollipop mould when the movable mould member moves from a free position to a wanted position[[,]]; and

wherein the device [[is]] further[[more]] ~~provided with~~ includes a means for stopping the motion of the mould member towards the wanted mould position, before the mould member reaches[[ing]] the wanted mould position so that in case of a deviation in [[said]] motion the deviation is detected by a detection means.

Claim 6 (Currently Amended): The [[D]]device according to claim 5, wherein the detection means ~~in question~~ are adapted for detecting an impediment in the movement of [[the]] a part ~~in question~~.

Claim 7 (Currently Amended): The [[D]]device according to claim 5, wherein the detection means ~~in question~~ are adapted for detecting a certain pressure build-up.

Claim 8 (Currently Amended): The [[D]]device according to claim 5, wherein the part ~~in question~~ is an upper mould ~~known per se~~, which is hinged to the drum and movable between an open position for access of lollipop material or removal of the lollipop formed, to or from, ~~respectively,~~ the lollipop mould ~~in question~~.

Claim 9 (Currently Amended): The [[D]]device according to claim 8, wherein use is made of a body having the shape of a segment of a circle, which is movable in a radial direction with respect to the drum[[,]];

wherein[[,]] ~~preferably~~[[,]] the body having [[a]]the shape of a segment of a circle is provided with a carrier and an insert piece of hard material for exerting press-on forces on the upper moulds[[,]];

wherein the insert piece ~~preferably~~ is detachably attached to the carrier and ~~preferably~~ is adjustably tiltable with respect to the carrier in order to be suited to a drum of an altered diameter.

Claim 10 (Currently Amended): The [[D]]device according to claim [[5]] 6, wherein the part ~~in question~~ is a pressure/mould piston movable in drum-axial direction,

wherein the device is ~~furthermore~~ provided with means for pressing the mould piston in the mould cavity.

Claim 11 (Currently Amended): The [[D]]device according to claim 10, wherein the means for pressing the mould piston in the mould cavity comprises:

i. a piston rod connected to the mould piston, and

ii. a cam track for axial movement of the end of the piston rod that is opposite the mould piston.

Claim 12 (Currently Amended): The [[D]]device according to claim 11, wherein the detection means are adapted for detecting a movement of the cam track or the construction parts connected thereto.

Claim 13 (Currently Amended): The [[D]]device according to claim 11, wherein the piston rods are provided with a roller for engaging the cam track.

Claim 14 (Currently Amended): The [[D]]device according to claim 1, wherein the means ~~in question~~ are adapted for operation by medium/fluid pressure[[,]]or ~~particularly~~ gas pressure ~~(and then be pneumatically active)~~, between a fixed part and a movable part.

Claim 15 (Currently Amended): A [[D]]device for manufacturing lollipops[[,]] comprising:

a) a rotatably driven drum ~~provided~~ with a casing;

b) a plurality of lollipop moulds at [[its]] the circumference of the casing[[,]];

c) a supply for supplying a strand of lollipop material to the plurality of lollipop moulds; [[and]]

d) a discharge for lollipops formed in the plurality of lollipop moulds[[,]]; and

e) a plurality of pressure/mould pistons located inside of the plurality of lollipop moulds;

wherein the drum is disposed on a hollow shaft; [[and]]

~~wherein the lollipop moulds are disposed at the circumference of a casing,~~

wherein the pressure/mould pistons [[that]] are movable in a drum-axial direction, and ~~are provided for~~ press[[ing]] the lollipop material into the plurality of lollipop moulds[[,]];

wherein the pistons include ~~are provided with~~ operation protrusions, such as piston rods, that are guided by a cam track[[,]]

wherein the cam track includes ~~which is provided with~~ an inclined run-in portion and a post-pressing portion, [[where]] so that the pressure is substantially preserved for a certain track length/period[[,]]; and

wherein the post-pressing portion ~~preferably~~ runs straight, ~~preferably~~ according to a line in a radial plane that is transverse to the drum axis.

Claim 16 (Currently Amended): The [[D]]device according to claim 15, wherein the piston rods ~~are provided with~~ include a roller for engaging the cam track.

Claim 17 (Currently Amended): The [[D]]device according to claim 16, wherein between the end of the run-in portion and the post-pressing portion, a recessed, slightly pressure-reducing press-on portion is present and/or wherein the post-pressing portion in pressure direction extends further than the end of the run-in portion.

Claim 18 (Currently Amended): A [[D]]device for manufacturing lollipops[[,]] comprising:

a) a rotatably driven drum ~~provided~~ with a casing;

b) a plurality of lollipop moulds at [[its]] the circumference of the casing[[,]];

c) a supply for supplying a strand of lollipop material to the plurality of lollipop moulds; and

d) a discharge for lollipops formed in the plurality of lollipop moulds[[,]];

~~wherein the lollipop moulds are disposed at the circumference of a casing,~~

wherein the plurality of lollipop moulds each comprise:

i. a first mould, such as a lower mould that is fixed to the casing; and

ii. a second mould, such as an upper mould that is hinged to the casing, which [[are]] is movable with respect to the first mould ~~each other between an~~

wherein the second mould includes an open position, [[for]] where ~~access of~~ lollipop material is added to the plurality of lollipop moulds or ~~removal of a~~ formed lollipops are removed from the plurality of lollipop moulds, ~~to or from, respectively, the lollipop mould in question~~ and a ~~position~~ closed position ~~by first press-on means~~,

wherein ~~in which~~ the lollipop [[can be]] is formed under pressure[[,]]; and

wherein the device is further[[more]] provided with a means for limiting [[the]] pressure ~~to a certain wanted value~~.

Claim 19 (Currently Amended): The [[D]]device according to claim 18, wherein the pressure limiting means are adapted for limiting the press-on force of the upper moulds on the lower moulds.

Claim 20 (Currently Amended): The [[D]]device according to claim 19, wherein the first press-on means for the upper moulds comprise a first press-on member that is movably disposed on the device.

Claim 21 (Currently Amended): The [[D]]device according to claim 20, ~~provided with~~ wherein the device includes a means that are operative by medium/fluid pressure for moving the first press-on member with respect to a fixed part on the device.

Claim 22 (Currently Amended): The [[D]]device according to claim 21, wherein the means operative by medium/fluid pressure are pneumatic.

Claim 23 (Currently Amended): The [[D]]device according to claim 21, wherein the pneumatic means comprise a bellows operative between the first press-on member and the fixed part.

Claim 24 (Currently Amended): The [[D]]device according to claim 20, wherein the first press-on member comprises a body having the shape of a segment of a circle that is movable in radial direction with respect to the drum.

Claim 25 (Currently Amended): The [[D]]device according to claim 24, wherein the body having the shape of a segment of a circle is provided with a carrier and an insert piece of hard material for exerting press-on forces on the upper moulds, wherein the insert piece ~~preferably~~ is detachably attached to the carrier.

Claim 26 (Currently Amended): The [[D]]device according to claim 25, wherein the insert piece is adjustably tiltable with respect to the carrier.

Claim 27 (Currently Amended): The [[D]]device according to claim 20, further~~more provided with~~ including a means for establishing a movement of the first press-on member in radial outward direction with respect to the drum, as well as [[with]] a means for influencing the press-on force of the first press-on member in response to a signal of the means for establishing a movement of the first press-on member.

Claim 28 (Currently Amended): The [[D]]device according to claim 18, wherein a mould piston that is movable in a drum-axial direction has been placed at every lollipop mould[[,]];

wherein the device is further[[more]] provided with second press-on means for pressing the mould piston into the mould cavity[[,]]; and

wherein the pressure limiting means are adapted for limiting the press-on force exerted by the mould piston.

Claim 29 (Currently Amended): The [[D]]device according to claim 28, wherein the second press-on means for the mould pistons comprise a second press-on member, that is disposed on the device so as to be movable in drum-axial direction.

Claim 30 (Currently Amended): The [[D]]device according to claim 29, provided with a means operative by medium/fluid pressure for moving the second press-on member with respect to a fixed part on the device.

Claim 31 (Currently Amended): The [[D]]device according to claim 30, wherein the means operative by medium/fluid pressure are pneumatic.

Claim 32 (Currently Amended): The [[D]]device according to claim 30, wherein the pneumatic means comprise a bellows that is operative between the second press-on member and the fixed part.

Claim 33 (Currently Amended): The [[D]]device according to claim 29, wherein the second press-on member comprises a body having a piloting edge for drum-axial[[,]] and a press-on

motion of the free end of pressure pins that project from the side of the mould pistons that faces away from the mould cavities.

Claim 34 (Currently Amended): The [[D]]device according to claim 29, wherein the second press-on member is attached to fixed parts of the device by means of a parallelogram structure.

Claim 35 (Currently Amended): The [[D]]device according to claim 29, further[[more]] ~~provided with~~ including a means for establishing a movement of the second press-on member in an axial outward direction with respect to fixed parts of the device, as well as with a means for influencing the press-on force of the second press-on member in response to a signal of the means for establishing a movement of the second press-on member.

Claim 36 (Currently Amended): The [[D]]device according to claim 34, wherein the establishing means are operative near and relatively freely movable vertex of the parallelogram structure.

Claim 37 (Currently Amended): A [[D]]device for manufacturing lollipops[[,]] comprising:

a) a rotatably driven drum ~~provided~~ with a casing;

b) a plurality of lollipop moulds at [[its]] the circumference of the casing [[,]];

c) a supply for supplying a strand of lollipop material to the plurality of lollipop moulds; and

d) a discharge for lollipops formed in the plurality of lollipop moulds[[,]];

~~wherein the lollipop moulds are disposed at the circumference of a casing,~~

wherein the device [[is]] further~~more provided with~~ includes a means for ~~bringing~~ inserting a lollipop stick into the lollipop mould[[,]];

wherein the lollipop stick is oriented in a direction parallel to the drum axis[[,]];

wherein the lollipop heads ~~preferably~~ are situated at the side of the sticks [[facing]] closest to the device[[,]];

wherein the device comprises:

i. a means for taking the lollipops out of the plurality of lollipop moulds and

ii. a means for transporting [[them]] the lollipops;

wherein [[with]] the lollipop sticks are parallel to the drum axis during transportation and[[,]] include [[in]] a first orientation [[with]] where the lollipop head is closest ~~proximal~~ to the device[[,]];

wherein the device [[is]] furthermore provided with includes a means for converting the orientation of the lollipop to a second orientation[[,]]; and

wherein the lollipop is discharged is adapted for discharging the lollipops in the second orientation.

Claim 38 (Currently Amended): The [[D]]device according to claim 37, wherein the conversion means are adapted for a conversion in an orientation of 180 degrees.

Claim 39 (Currently Amended): The [[D]]device according to claim 37, wherein the conversion means comprise a number of cooperating transport disks, of which the axes of rotation are perpendicular to each other.

Claim 40 (Currently Amended): The [[D]]device according to claim 39, wherein the conversion means comprise a train of at least two transport disks.

Claim 41 (Currently Amended): A [[D]]device for transferring lollipops provided with sticks from a location of receipt to a location of discharge[[,]] comprising:

a) a rotatingly driven disk and

b) a series of stick clamps fixedly attached [[there]]to the rotatingly driven disk,

wherein the [[which]] stick clamps comprise:

i. a first [[two]] clamping member[[s]] or clamping jaws, and

ii. a second clamping member;

wherein the first clamping member and the second clamping member each include a clamping jaw;

wherein the first clamping member [[are]] is movable and the second clampling member is fixed; preferably

wherein the stick clamp is biassed to a—stable—closed position, in which the[[y]] two clamping jaws are able to clamp a stick[[,]];

wherein the clamped stick is held by the two clamping jawspreferably parallel to the disk axis[[,]];

wherein preferably by means of a fixedly positioned operation means, such as a cam, engages[[ing on]] an operation arm of [[one of]] the first clamping member[[s]], so that the clamping members [[can be]] are urged apart to an open position, in which where a stick [[can be]] is received by the stick clamp or taken out the stick clamp[[,]] respectively[[,]]; and

wherein ~~preferably one of the clamping members~~ is immovably attached on a disk, ~~and~~ the first [[other]] clamping member is bias[[s]]ed towards the second clamping member [[it]] and the first clamping member is temporarily movable away from the second ~~immovably attached~~ clamping member~~, against the biassing force~~, by the operation means.

Claim 42 (Currently Amended): A [[D]]device for manufacturing lollipops[[,]] comprising:

a) a frame and

b) a drum ~~disposed thereon~~ located on the frame[[,]];

wherein the drum includes ~~which is provided with~~ a casing with a circulating series of lower moulds thereon and a series of upper moulds;

wherein the upper moulds [[that]] are movable between an open position, for receipt of lollipop material or discharge of a lollipop, and a closed position for forming a mould cavity,

wherein the casing is detachably connected to the frame as one unity.

Claim 43 (Currently Amended): The [[D]]device according to claim 42, wherein the casing is disposed on a hollow shaft, that is stationary and on which bearings for the casing are provided, wherein the casing is detachable from the hollow shaft and the hollow shaft is attached to the frame.

Claim 44 (Currently Amended): A [[D]]device for manufacturing lollipops[[,]] comprising:

a) a frame and

b) a drum ~~disposed thereon,~~ located on the frame;

wherein ~~which~~ the drum includes ~~is provided with~~ a casing having a circulating series of lower moulds thereon and a series of upper moulds that are movable between an open position, for receipt of lollipop material or discharge of a lollipop, and a closed position for forming a mould cavity,

wherein the upper moulds are provided with an accommodation space for slidingly accommodating a guide that is fixed to the frame for [[said]] motion of the upper moulds.

Claim 45 (Currently Amended): The [[D]]device according to claim 44, wherein the guide is ~~formed like~~ a formed piece[[,]] or ~~for instance~~ a moulded piece, such as a bent plate, or a [[(]]bent[[)]] rod.

Claim 46 (Currently Amended): The [[D]]device according to claim 44, wherein the guide

defines a guiding edge and the accommodation space surrounds the guiding edge for more than 180 degrees, considered in cross-section perpendicular to the guiding edge.

Claim 47 (Currently Amended): The [[D]]device according to claim 44, wherein in the closed position of the upper moulds the accommodation space is oriented axially away from the frame.

Claim 48 (Currently Amended): The [[D]]device according to claim 44, wherein the guide has a path length corresponding to the length of the path of the casing between the point of receipt and the point of discharge.

Claim 49 (Currently Amended): The [[D]]device according to claim 44, wherein the upper moulds are hinged to the drum, ~~wherein~~ and the hinge is situated closer to the frame than the free end of the upper moulds[[,]] ~~preferably approximately halfway the upper moulds~~.

Claim 50 - 51 (Cancelled):